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- 15. A method of determining the phenotypic effect of a compound, said method comprising the steps of:
 - (1) exposing a transgenic rodent claim 1 to said compound;
 - (2) and determining changes in phenotype.
- 16. The method according to claim 15, wherein the phenotype corresponds to a UCP3-related disease selected from the group consisting of: obesity, diabetes, hyperlipidaemia, body weight disorders, wound healing, cachexia, inflammation, tissue repair, and atherosclerosis.

REMARKS

This Preliminary Amendment is being made upon entry of International Application No. PCT/GB00/03747 into the U.S. National Phase of prosecution. Claims 2-6, 9-12, and 14-16 have been amended to eliminate multiple dependencies and to comply with proper U.S. claim format. Furthermore, attached hereto is a marked-up version of the changes made to the application by the current preliminary amendment. The attached page is captioned, "Version with markings to show changes made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

CROSS REFERENCES TO RELATED APPLICATIONS

This newly added paragraph to the specification is solely to incorporate continuing application data. No changes have been made. Therefore, a marked up version is not required.

The newly added page to the specification is solely to incorporate the Abstract page. No changes have been made, therefore, a marked up version is not required.

In the claims:

- 2. [A] <u>The</u> transgenic rodent according to claim 1 wherein the polynucleotide encoding a human UCP3 polypeptide is selected from the group consisting of:
- (a) a polynucleotide comprising a polynucleotide sequence having at least 95%, 96%, 97%, 98%, or 99% identity to the polynucleotide sequence of SEQ ID NO:1;
- (b) a polynucleotide comprising the polynucleotide of SEQ ID NO:1;
- (c) a polynucleotide having at least 95%, 96%, 97%, 98%, or 99% identity to the polynucleotide of SEQ ID NO:1;
- (d) the polynucleotide of SEQ ID NO:1;
- (e) a polynucleotide comprising a polynucleotide sequence encoding a polypeptide sequence having at least 95%, 96%, 97%, 98%, or 99% identity to the polypeptide sequence of SEQ ID NO:2;
- (f) a polynucleotide comprising a polynucleotide sequence encoding the polypeptide of SEQ ID NO:2;
- (g) a polynucleotide having a polynucleotide sequence encoding a polypeptide sequence having at least 95%, 96%, 97%, 98%, or 99% identity to the polypeptide sequence of SEQ ID NO:2;
- (h) a polynucleotide encoding the polypeptide of SEQ ID NO:2;

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(i) a polynucleotide having or comprising a polynucleotide sequence that has an Identity Index of 0.95, 0.96, 0.97, 0.98, or 0.99 compared to the polynucleotide sequence of SEQ ID NO:1; and

- (j) a polynucleotide having or comprising a polynucleotide sequence encoding a polypeptide sequence that has an Identity Index of 0.95, 0.96, 0.97, 0.98, or 0.99 compared to the polypeptide sequence of SEQ ID NO:2.
- 3. [A] The transgenic rodent according to claim 1 [or 2] wherein the rodent is selected from the group consisting of:
 - a) mouse; and
 - b) rat.
- 4. [A] The transgenic rodent according to [any one of] claim[s] 1 [to 3] wherein the polynucleotide encodes a human UCP3 polypeptide of SEQ ID NO:2.
- 5. [A] <u>The</u> transgenic rodent according to [any one of] claim[s 1 to 4] <u>2</u> wherein the polynucleotide encoding a human UCP3 polypeptide is the polynucleotide of SEQ ID NO:1.
- 6. The transgenic rodent of [any one of] claim[s]1 [to 5] wherein the human UCP3 polypeptide is expressed predominantly in skeletal muscle.
- 9. The transgenic rodent of [any one of] claim[s]1, wherein said transgenic rodent [to 8] exhibits[ing] reduced body weight.
- 10. The transgenic rodent of [any one of] claim[s]1, wherein said transgenic rodent [to 8] exhibits[ing] increased wound-healing.
- 11. A method of producing the transgenic rodent [of any one of the preceding] <u>as</u> <u>claimed in claim[s] 1, said method</u> comprising the steps <u>of</u>:

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- a) preparing transgene construct comprising coding region of the gene of interest operably linked to an appropriate regulatory sequence;
- b) removing vector sequences by restriction digest;
- c) introducing the transgene into the rodent by pronuclear injection; and
- d) re-transferring the injected eggs into the uteri of pseudo-pregnant recipient mothers.
- 12. The [A] method of producing the [a] transgenic rodent according to claim 11, wherein the rodent is a mouse and the transgene is introduced into mouse ES cells[,] using a method selected from the group consisting of: electroporation, retroviral vectors, [or] and lipofection for gene transfer.
- 14. [A] <u>The</u> transgene according to claim 13, wherein the rodent regulatory sequence is the alpha-actin promoter.
- 15. A method of determining the phenotypic effect of a compound, said method comprising the steps of:
 - (1) exposing a transgenic rodent [of any one of] claim[s] 1 [to 10] to said compound; (2) and determining changes in phenotype.
- 16. [A] The method according to claim 15, wherein the phenotype [is that of] corresponds to a UCP3-related disease selected from the group consisting of: obesity, diabetes, hyperlipidaemia, body weight disorders, wound healing, cachexia, inflammation, tissue repair, and atherosclerosis.